PERFORMANCE SPECIFICATION

PRODUCT TITLE: AC AXIAL FAN

MODEL NO: AC11938R

1、SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE AC AXIAL FLOW FAN·THE FAN MOTOR IS SHADED POLE MOTOR WITH EXTERNAL ROTOR.

2、ELECTRICAL CHARACTERISTICS:

ALL MEASUREMENTS PERFORMED AT 20~30℃ ROOM TEMPERATURE &50~70%R.H.UNLESS OTHERWISE SPECIFIED·

ITEM	DESCRIPTION	UNIT	SYMBOL	SPEC.		CONDITION
				50Hz	60Hz	
1	RATED VOLTAGE	VOLTS	V	230 AC		
2	OPERATION VOLTAGE	VOLTS	V	215～245 AC		
3	INPUT CURRENT	AMP	A	0.14 MAX	0.13 MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	22MAX	21 MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	2650±10%	3000±10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	49±10%	54±10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	82±10%	90±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmH_2O	P	5.80±10	6.0±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
9	INSULATION RESISTANCE	MEG. OHM	MΩ	10MΩ MIN. AT 500V DC		BETWEEN FRAME AND LEAD WIRE.
10	DIELECTRIC STRENGTH	MILLI-AMP	mA	5mA MAX. AT 500V AC 60Hz. FOR 1 MINUTE		BETWEEN FRAME AND LEAD WIRE.

ITEM	DESCRIPTION	SPEC.	
11	ROTATION	CW VIEW FROM NAME PLATE SIDE	
12	AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS	
13	INSULATION CLASS	CLASS B	
14	LIFE EXPECTANCY	50000 HOURS CONTINUOUS	A
15	SAFETY APPROVAL	UL, CSA, TUV, CE, IP-54	

A LIFE IS DEFINED AS THE TIME MOTOR SPEED DECREASED MORE THAN 30% COMPARED WITH INITIAL VALUE.

3、MECHANICAL

3-1. FRAME METAL CONSTRUCTION WITH ALUMINIUM DIE-CASTING

3-2. FAN BLADE MADE OF METAL MATERIAL SPOT WELDING ON ROTOR SHELL

3-3. COATING CED (CATHONIC ELECTRODEPOSITION COATING WITH EPOXY) COATING ON METAL SURFACE BE CAPABLE OF IMPACT RESISTANT AND ABRASION RESISTANT

3-4. BEARING SYSTEM -------- BALL BEARING

3-5. WEIGHT ---------- 600 GRAMS

3-6. LEAD WIRE ---------- 1007 AWG # 22

3-7. TYPE OF OUT PUT --------- LEADWIRE OR TERMINAL FASTON

3-8. PLASTIC PARTS ---------- UNFLAMABLE MATERIAL, MEET UL 94V-0 RATING

4、ENVIRONMENTAL:

4-1. OPERATING TEMPERATURE---------- -10 TO +70 ºC

4-2. STORAGE TEMPERATURE ---------- -30 TO +75 ºC

4-3. OPERATING HUMIDITY ----------RH 20% ~ 85%

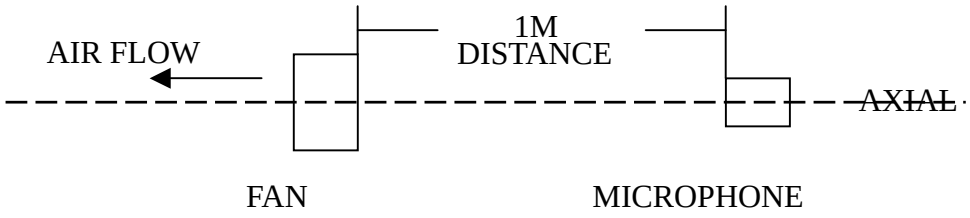
5、PROTECTION:

5-1. IMPEDANCE PROTECTION

IMPEDANCE OF MOTOR COIL WINDING PROTECTS MOTOR FROM FLAMING IN THE CONDITION OF 72 Hrs LOCKED ROTOR AT RATED VOLTAGE

6、ACOUSTICAL NOISE:

6-1. MEASUREMENT SET-UP



6-2. MEASUREMENT PERFORMED IN ANECHOIC TEST CHAMBER UNDER FREE AIR CONDITION.

6-3. CHAMBER BACKGROUND NOISE 17dB MAX.

6-4. READING TAKEN FROM SPECTRUN ANALYZER.

6-5. NOISE DISTRIBUTION CURVE SEE ATTACHED PAGE.

7、STATICS PRESSURE VS AIR FLOW CURVE:

MEASURED PER TWO CHAMBER METHOD.

DATA-CURVE SEE ATTACHED PAGE

NOISE TEST REPORT

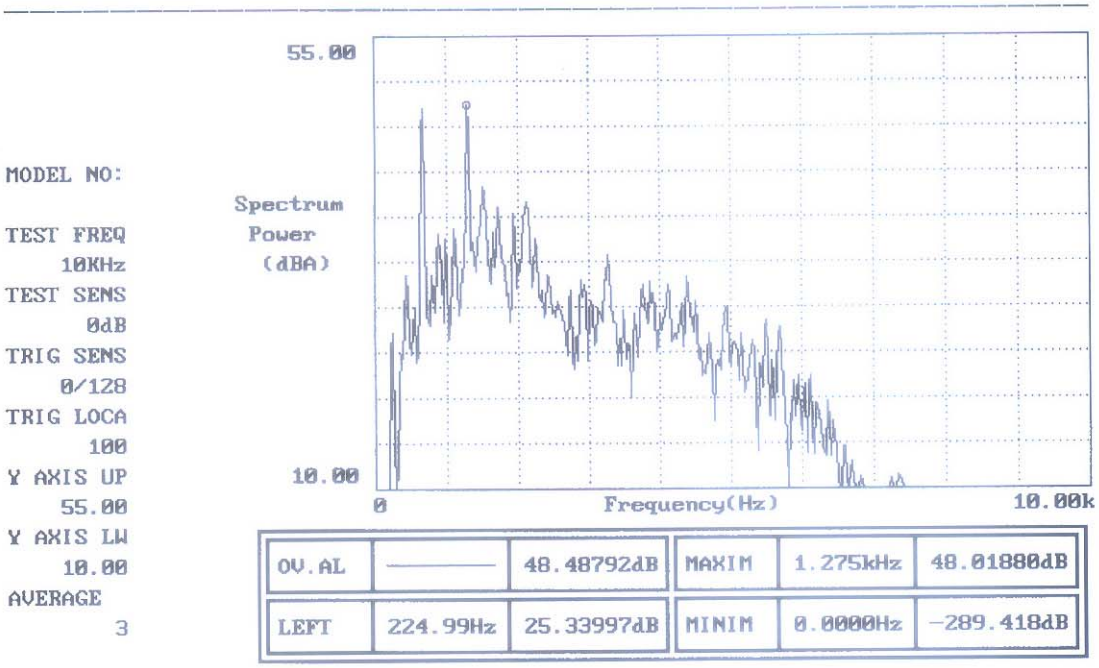
MODEL: **AC 11938R**

SAMPLING: / pcs

TEST PURPOSE: ☑ Evaluation

☐ I P Q C

☐ Q A

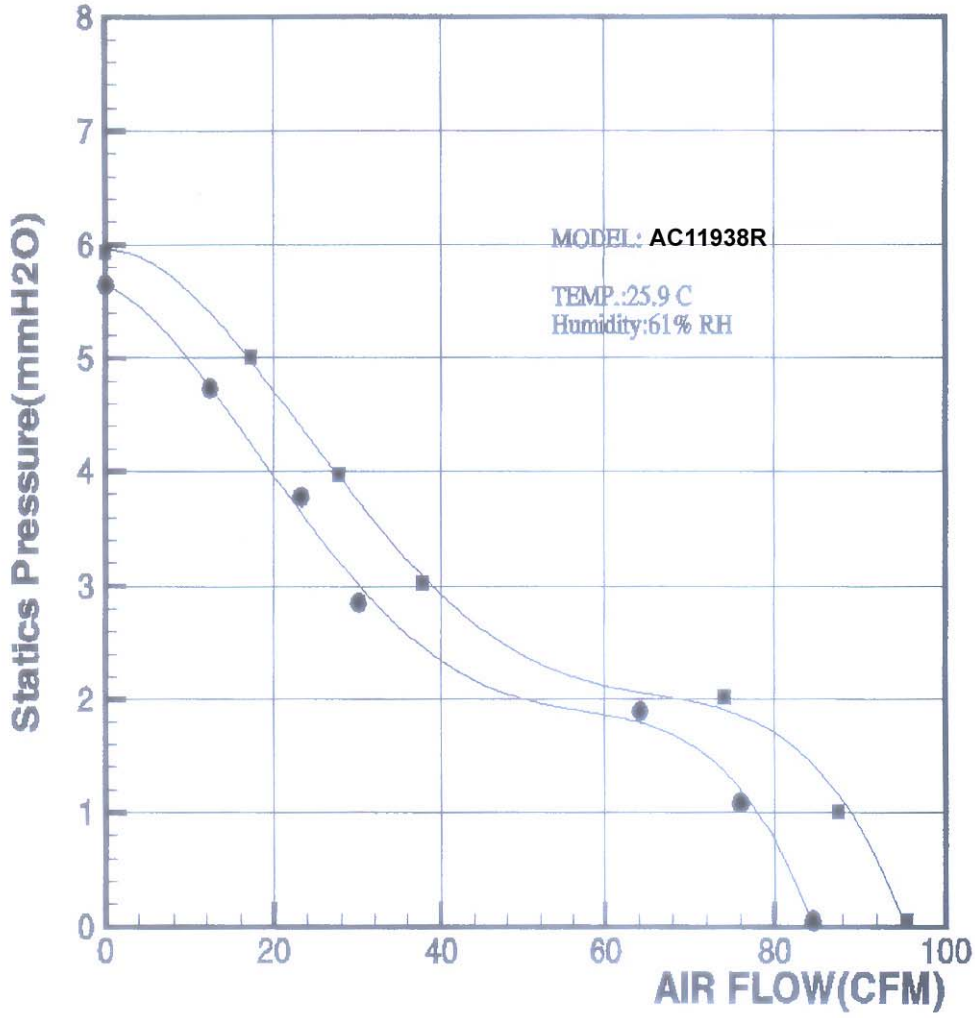


ANALYSIS:

(1) Background Noise : 17dBA
(2) FFT Analyzer
(3) Sound Pressure Level Meter
No.RR01.04A

Reporter:

FAN PERFORMANCE CURVES



FAN PERFORMANCE DATA SHEET

Customer:
Fan Mode: **AC11938R**
Testing Method: Constant Voltage
Testing Voltage: AC 230 V,50/60Hz
Barometric Pressure (cmHg):
Dry Bulb Temperature (C):25.9
Relative Humidity (%) 61
File Name:4E-2

Test No: 4E-2
System Setup:outlet Chamber
Testing Date:28-02-2001
Barometric Density (kg/m3):1.14
Testing Engineer:Chen Jr Wei
Remark:

No		CFM	mmAq	inAq	A	RPM	Watt	
50Hz	1	84.53	0.05	0.001	0.002	2575	22	
	2	76.01	1.08	0.042	0.042	2540	22	
	3	64.2	1.89	0.074	0.746	2496	22	
	4	30.13	2.848	0.112	0.112	2550	22	
	5	23.3	3.778	0.148	0.148	2441	22	
	6	12.38	4.73	0.186	0.186	2398	22	
	7	0	5.64	0.222	0.222	2340	22	
No		CFM	mmAq	inAq	A	RPM	Watt	
60Hz	1	95.42	0.05	0.002	0.002	2911	21	
	2	87.48	1	0.039	0.396	2848	21	
	3	74.14	2.01	0.079	0.079	2757	21	
	4	37.72	3.02	0.118	0.118	2786	21	
	5	27.74	3.97	0.156	0.156	2671	21	
	6	17.25	5.01	0.197	0.197	2534	21	
	7	0	5.93	0.233	0.233	2401	21	